

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (canceled).

2. (currently amended): A tire comprising at least one tread layer consisting of a tread rubber made of a low-conductive rubber and an electrically conductive band arranged in widthwise middle portion of the tread rubber and constituting at least a part of a conductive path from a belt to a treading face of a tread in which a first tread rubber portion of the tread rubber separated from a second tread rubber portion by the electrically conductive band is arranged so as to orient a side face thereof contacting with the electrically conductive band outward in the radial direction, and the electrically conductive band is made of a high-conductive thin annular rubber sheet and the high-conductive thin annular rubber sheet comprising

a top part extending in a tire width direction on a top face of the first tread rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second tread rubber portion separated by the electrically conductive band and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction,

wherein the tread rubber is made of a low-conductive continuous rubber ribbon circumferentially wound plural times.

3. (canceled).

4. (previously presented): A tire according to claim 2, wherein the side face of the first tread rubber portion contacting with the electrically conductive band has an average inclination angle of 45-75° with respect to an equatorial plane of the tire.

5. (previously presented): A tire according to claim 2, wherein the tread layer is arranged as at least innermost layer in the radial direction.

6. (previously presented): A tire according to claim 2, wherein at least two of the tread layers are arranged adjacent to each other inside and outside in the radial direction and the electrically conductive bands in the at least two of the tread layers are contacted with each other over the full periphery.

Claims 7-9 (canceled).

10. (previously presented): A method according to claim 11, wherein the high-conductive uncured rubber sheet is formed by rolling in a calendar.

11. (currently amended): A method of producing a tire comprising
at least one tread layer consisting of a tread rubber made of a low-conductive rubber and
an electrically conductive band and

a belt arranged in an inner side of the at least one tread layer in a tire radial direction
the method comprising
circumferentially winding a continuous low-conductive uncured rubber ribbon plural
times to form an uncured tread rubber,

winding a thin high-conductive uncured rubber sheet on an outer periphery of a rotating,
displacing tire raw member one time to form an uncured electrically conductive band, the tire
raw member comprising the belt and

wherein the electrically conductive band is made of a high-conductive thin annular rubber
sheet, which is arranged in a widthwise middle -portion of the tread rubber and-constitutes at
least a part of a conductive path from the belt to a treading face of a tread in which a first tread
rubber portion of the tread rubber separated from a second tread rubber portion by the
electrically conductive band is arranged so as to orient a side face thereof contacting with the
electrically conductive band outward in the radial direction, and the electrically conductive band
is made of a high-conductive thin annular rubber sheet comprising:

a top part extending on a top face of the first tread rubber portion,
a bottom part extending under a bottom face of the second tread rubber portion separated
by the electrically conductive band and
a middle part extending from an end of the top part in the width direction toward an end
of the bottom part in the width direction.

Claim 12 (canceled).

13. (new): A tire comprising:

a base tread layer, wherein the base tread layer comprises:

a first base tread rubber portion and

a second base tread rubber portion,

wherein an electrically conductive base band is arranged in widthwise middle portion of the base tread rubber and comprises at least a part of a conductive path from an radially inner surface of the base tread layer to an radially outer surface of the base tread layer, in which the first base tread rubber portion is separated from the second base tread rubber portion by the electrically conductive base band and is arranged so as to orient a side face thereof contacting with the electrically conductive base band outward in the radial direction, and

wherein the electrically conductive base band comprising

a top part extending in a tire width direction on a top face of the first base tread rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second base tread rubber portion separated by the electrically conductive base band, and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction, the middle part being inclined with respect at least one of the top face of the first base tread rubber portion and the bottom face of the second base tread rubber portion; and

a cap tread layer disposed outside of the base tread layer, wherein the cap tread layer comprises:

a first cap tread rubber portion and

a second cap tread rubber portion,

wherein an electrically conductive cap band is arranged in widthwise middle portion of the cap tread rubber and comprises at least a part of a conductive path from an radially inner surface of the cap tread layer to an radially outer surface of the cap tread layer, in which the first cap tread rubber portion is separated from the second cap tread rubber portion by the electrically conductive band and is arranged so as to orient a side face thereof contacting with the electrically conductive cap band outward in the radial direction, and

wherein the electrically conductive cap band comprising

a top part extending in a tire width direction on a top face of the first base cap rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second cap tread rubber portion separated by the electrically conductive cap band, and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction, the middle part being inclined with respect at least one of the top face of the first base tread rubber portion and the bottom face of the second base tread rubber portion;

wherein the electrically conductive cap band is electrically connected to the electrically conductive base band and the middle part of the electrically conductive cap band is inclined in a direction opposite to a direction in which the middle part of the electrically conductive base band is inclined.

14. A method of producing a tire comprising

a base tread layer, wherein the base tread layer comprises:

a first base tread rubber portion made of a low conductive rubber and

a second base tread rubber portion made of a low conductive rubber,

wherein an electrically conductive base band is arranged in widthwise middle portion of the base tread rubber and comprises at least a part of a conductive path from an radially inner surface of the base tread layer to an radially outer surface of the base tread layer, in which the first base tread rubber portion is separated from the second base tread rubber portion by the electrically conductive base band and is arranged so as to orient a side face thereof contacting with the electrically conductive base band outward in the radial direction, and

wherein the electrically conductive base band comprising

a top part extending in a tire width direction on a top face of the first base tread rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second base tread rubber portion separated by the electrically conductive base band, and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction, the middle part being inclined with respect at least one of the top face of the first base tread rubber portion and the bottom face of the second base tread rubber portion;

a cap tread layer disposed outside of the base tread layer, wherein the cap tread layer comprises:

a first cap tread rubber portion made of a low conductive rubber,
a second cap tread rubber portion made of a low conductive rubber,

wherein an electrically conductive cap band is arranged in widthwise middle portion of the cap tread rubber and comprises at least a part of a conductive path from an radially inner surface of the cap tread layer to an radially outer surface of the cap tread layer, in which the first cap tread rubber portion is separated from the second cap tread rubber portion by the electrically conductive band and is arranged so as to orient a side face thereof contacting with the electrically conductive cap band outward in the radial direction, and

wherein the electrically conductive cap band comprising

a top part extending in a tire width direction on a top face of the first base cap rubber portion,

a bottom part extending in the tire width direction under a bottom face of the second cap tread rubber portion separated by the electrically conductive cap band, and

a middle part extending from an end of the top part in the width direction toward an end of the bottom part in the width direction, the middle part being inclined with respect at least one of the top face of the first base tread rubber portion and the bottom face of the second base tread rubber portion;

wherein the electrically conductive cap band is electrically connected to the electrically conductive base band and the middle part of the electrically conductive cap band is inclined in a direction opposite to a direction in which the middle part of the electrically conductive base band is inclined; and

a belt arranged in an inner side of the base tread layer in a tire radial direction, the method comprising:

circumferentially winding a continuous low-conductive uncured rubber ribbon plural times to form a plurality of uncured tread rubber portions,

winding a thin high-conductive uncured rubber sheet on an outer periphery of a rotating, displacing tire raw member one time to form an uncured electrically conductive band, the tire raw member comprising the belt.